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REMARKS

Claims 1-66 are currently pending in the subject application and are presently under consideration. A clean version of all pending claims is found at pages 2-13. New claims 57-66 have been added to emphasize novel aspects of the subject invention discussed *infra*. These claims do not raise new issues requiring further search or undue effort by the Examiner, and therefore entry and consideration thereof is respectfully requested.

I. Rejection of Claims 1-9, 14, 15, 16, 19, 22, 23, 24, 25, 26, 27, 28, 32, 33, 34, and 35 Under 35 U.S.C. §103(a)

Claims 1-9, 14, 15, 16, 19, 22, 23, 24, 25, 26, 27, 28, 32, 33, 34, and 35 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Barrett *et al.* ("Barrett") (US 6,005,597) in view of Payton (US 5,790,935). It is submitted that this rejection should be withdrawn for at least the following reasons. Neither Barrett nor Payton, alone or in combination, teach or suggest the subject invention.

To reject claims in an application under §103, an examiner must establish a *prima facie* case of obviousness. A *prima facie* case of obviousness is established by a showing of three basic criteria. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, *the prior art reference (or references when combined) must teach or suggest all the claim limitations*. See MPEP §706.02(j). The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art and not based on applicant's disclosure. See *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991) (emphasis added).

The subject invention relates to storing information locally that is received from an information delivery system for viewing at a local system and provides advantages over the prior art by overcoming limitations regarding local hard disk space, difficulties implementing collaborative filtering systems for systems with more than one user, *etc.* Neither Barrett *et*

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al. nor Payton, alone or in combination, teach or suggest logging information locally relating to previously accessed media, using such log information to train an inference system that assigns values to various items, and using such values as a basis for storing information as in applicants' invention as recited in independent claim 1.

More particularly, one novel aspect of the subject claimed invention provides for assessing or inferring time-dependent utility functions and dynamically computing changing *value densities* (computed as the changing likelihood that the content will be reviewed divided by the storage costs of the content) across multiple items to, for example, repack, recompress and/or replace old items with new items – where the utility can be computed as the likelihood that an item will be watched given evidence (*e.g.*, including other shows watched and the time that the items remained un-accessed). Moreover, the claimed invention provides for considering different decay rates per respective volatilities of content (*e.g.*, as breaking news ages without being watched it becomes less valuable more quickly than the more time-independent content of a documentary).

It appears the Examiner is impermissibly searching through the references in pursuit of elements (taken out of context) using applicants' specification (*e.g.*, *value density* is an important concept introduced by the applicant) as a roadmap in an attempt to reconstruct the subject claimed invention. Barrett *et al.* relates to a system that facilitates user(s) quickly selecting desirable programs from among a plurality of available programs by predicting user interest via employment of profiles of the user and collaborative information obtained from profiles of other existing viewers. There is no teaching or suggestion in Barrett *et al.* of locally storing selected information as a function of assigned values to respective selections based on a temporal relationship of when selections were previously viewed/accessed as in the claimed invention.

Payton does not make up for the aforementioned shortcomings of Barrett *et al.* Payton teaches optimizing on-line demand delivery of media from a central distribution center. The system of Payton teaches predicting media that subscribers are likely to request based on user profiles and pre-storing such media locally to reduce the number of requests that must be provided on-demand from the central distribution center. There is no teaching or suggestion in Payton of optimizing utilization of valuable and limited local storage space,

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and preserving items deemed valuable to a user over items of less value as in applicants' claimed invention.

The subject invention logs selections of previously viewed information in a database, which can include, for example, title selections time stamped with different time segments by event type and class type. The logged data can be annotated with distinctions about the time of day that a system user has viewed the information. (See pg. 7, ln. 13-31; pg. 8, ln. 3-6). The claimed invention employs the logged selections in connection with the inference system, and thus facilitates implementation of various probabilistic predictive model techniques in connection with storing/preserving the respective selections.

Independent claim 14 recites a utility system that monitors program selection information in the local memory system and communicates value information to the cache loading system for *removing information residing in the local memory system in exchange for information having a higher value received by the program delivery system*. Neither Barrett *et al.* nor Payton teach or suggest such aspects of the applicants' invention as discussed *supra*. The claimed invention facilitates overcoming prior art limitations relating hard disk space limitations and preserving most valuable items within the confines of the hard disk storage limitations.

Independent claim 32 recites a local system having a memory loading system that *determines a portion of a multimedia program, downloadable from a remote source to the local system, to store locally based on a local viewing rate and a remote transmission rate* of the multimedia program, and a storage system that *stores a portion of the multimedia program necessary for uninterrupted viewing* ... wherein a remaining portion of the multimedia program is downloaded to the storage system while the multimedia program is being viewed until the entire multimedia program has been downloaded. Neither Barrett *et al.* nor Payton teach or suggest such aspects of the claimed invention. Payton teaches storing an *entire item* locally to reduce the number of subscriber requests that must be provided on-demand from the central distribution server. (col. 3, ln. 33-42). Conversely, the claimed invention teaches balancing local storage limitations and remote transmission rates with providing uninterrupted viewing of the multi-media.

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In view of at least the above, it is readily apparent that the combination of Barrett *et al.* and Payton does not teach or suggest the subject invention as recited in claims 1, 14, and 32 (and claims 2-9, 15, 16, 19, 22-28, and 33-35 which respectively depend there from). This rejection should be withdrawn.

II. Rejection of Claims 37-56 Under 35 U.S.C. §103(a)

Claims 37-56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Barrett *et al.* in view of Macrae *et al.* (US 6,233,734). It is submitted that this rejection should be withdrawn for at least the following reasons. Neither Barrett *et al.* nor Macrae *et al.*, alone or in combination, teach or suggest the subject claimed invention.

Independent claims 37 and 47 recite *removing information from a storage medium as its value causes it to fall outside limits of the storage medium*. As noted by the Examiner, Barrett *et al.* does not teach or suggest such aspects of the applicants' invention. Moreover, Macrae *et al.* does not teach or suggest such aspects of the claimed invention. Macrae *et al.* teaches deleting items and recovering database storage space, but does not teach or suggest removing information *as its value causes it to fall outside the limits of the storage medium*. Macrae *et al.* teaches a relatively simplistic methodology where a schedule of events drives transfer of information into a local data store. Applicants' claimed invention utilizes value(s), which are *assigned and dynamically adjusted*, to address hard disk storage space limitations.

Neither Barrett nor Macrae teach or suggest a utility system wherein *high values are assigned to live show selections currently in progress* as recited in independent claim 53. This aspect of the applicants' invention facilitates constant replacement of new live show selections for old live show selections. (See pg. 19, ln. 9). Therefore, the subject invention facilitates "near real time" watching of selections for a viewer who begins watching briefly after a show is already in progress. (See pg. 19, ln. 20-23).

In view of at least the above, it is readily apparent that the combination of Barrett and Macrae does not teach or suggest the subject invention as recited in independent claims 37, 47, and 53 (and claims 38-46, 48-52, and 54-56 which depend there from). This rejection should be withdrawn.

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III. Rejection of Claims 10-13, 17, 18, 20, 21, 29, 30, 31, and 36 Under
35 U.S.C. §103(a)

Claims 10-13, 17, 18, 20, 21, 29, 30, 31, and 36 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Barrett *et al.* in view of Payton and further in view of Macrae *et al.* It is submitted that this rejection should be withdrawn for at least the following reasons. Neither Barrett *et al.* nor Payton nor Macrae *et al.*, alone or in combination, teach or suggest every limitation set forth in the subject claims.

In particular, claims 10-13, 17, 18, 20, 21, 29-31, and 36 depend directly or indirectly from independent claims 1, 14, and 32 respectively. As noted above, the cited references do not teach or suggest applicants' invention as recited in these independent claims, and therefore do not make obvious applicants' claimed invention. This rejection should be withdrawn.

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IV. CONCLUSION

The present application is believed to be in condition for allowance in view of the above comments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

AMIN & TUROCY, LLP



Himanshu S. Amin

Reg. No. 40,894

AMIN & TUROCY, LLP
24TH Floor, National City Center
1900 E. 9TH Street
Cleveland, Ohio 44114
Telephone (216) 696-8730
Facsimile (216) 696-8731

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